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PATENTS/F.6083

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Applicant: FRANCIS ALEXANDER ESPERANCE, JR. EXAMINER GROUP 320

Serial No.: 916,646

S, Douglas
7-2-87
6/purple

Filed: October

Filed: October 8, 1986

Group: 335

Examiner: David Shay

For: APPARATUS FOR OPHTHALMOLOGICAL SURGERY

New York, New York 10165
June 29, 1987

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SUPPLEMENTARY AMENDMENT

The Commissioner of Patents and Trademarks
Washington, D. C. 20231

Sir:

Further to the Amendment dated April 22, 1987 in the above-identified application, please add the following claims 29 to 62:

-- 29. Apparatus for performing ophthalmological surgery by selective ablation of the anterior surface of the cornea with penetration into the stroma to achieve a volumetric removal of corneal tissue, said apparatus comprising laser means having a chassis and producing an output beam in the ultraviolet portion of the electromagnetic spectrum and characterized by a spot which at cornea impingement is small in relation to the cornea to be operated upon, said laser means including means for adjusting beam-exposure flux to a level at which resultant corneal-tissue ablation per unit time is to an ascertained elemental depth which is but a fraction of the desired maximum depth of ablation into the stroma region, scan-deflection means positioned for deflection of said beam in a limited field about a central axis, means for steadyng the cornea with respect to said chassis and with the central area of the cornea centered on the central axis of scan deflection of said beam, said scan-deflection means having two coordinates of deflection for area coverage within the perimeter of said central area, and means including a microprocessor for

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